Washing method, for program-controlled washing machine, has rev range for each rotation cycle determined in dependence on washing load

Legal status (INPADOC) of **DE10217009**

DE F	**10217009 A**	(Patent of invention)
PRS Date :	2003/10/16	
PRS Code :	8304	
Code Expl.:	+ GRANT AFTER EXAMINATION PROCEDURE	
PRS Date :	2003/10/16	
PRS Code :	8100	
Code Expl.:	+ PUBLICATION OF THE EXAMINED APPLICATION WITHOUT PUBLICATION OF UNEXAMINED APPLICATION	
PRS Date :	2004/04/15	
PRS Code :	8364	
Code Expl.:	+ NO OPPOSITION DURING TERM OF OPPOSITION	
PRS Date :	2004/05/13	
PRS Code :	8320	
Code Expl.:	WILLINGNESS TO GRANT LICENSES DECLARED (PARAGRAPH 23)	

Method to control the drum rotating speed of a program controlled machine for treating clothes

Legal status (INPADOC) of **EP1354997**

EP F	**03006976 A**	(Patent of invention)
PRS Date :	2003/10/22	
PRS Code :	AK	
Code Expl.:	+ DESIGNATED CONTRACTING STATES:	
KD OF CORRESP. PAT.:	A1	
DESIGNATED COUNTR.:	AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR	
PRS Date :	2003/10/22	
PRS Code :	AX	
Code Expl.:	+ EXTENSION OF THE EUROPEAN PATENT TO	
CONCERNED COUNTRIES:	AL LT LV MK	
PRS Date :	2004/05/06	
PRS Code :	17P	
Code Expl.:	+ REQUEST FOR EXAMINATION FILED	
EFFECTIVE DATE:	20040304	
PRS Date :	2004/07/14	
PRS Code :	AKX	
Code Expl.:	+ PAYMENT OF DESIGNATION FEES	
DESIGNATED COUNTR.:	AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR	
PRS Date :	2004/07/28	
PRS Code :	17Q	
Code Expl.:	+ FIRST EXAMINATION REPORT	
EFFECTIVE DATE:	20040614	

Method to control the drum rotating speed of a program controlled machine for treating clothes

Patent number: EP1354997
Publication date: 2003-10-22
Inventor: DIETZ WALTER (DE); KRAUSE DIETHARD (DE); SCHNEIDER DANIEL (DE)
Applicant: MIELE & CIE (DE)
Classification:
- international: D06F35/00; D06F58/28
- european: D06F35/00; D06F58/28
Application number: EP20030006976 20030327
Priority number(s): DE20021017009 20020416

Also published as:
DE10217009 (C1)

Cited documents:
GB2253215
US5335524
US5560061
GB2322141
DE3741792
US5704136
JP11057297
less <<

Report a data error here

Abstract of **EP1354997**

The washing method has the washing program divided into successive steps, with intermediate pauses between individual rotation cycles in which the drive motor for the rotary washing drum is operated at different revs lying between a lower rev value and an upper rev value selected in dependence on the measured loading of the washing machine drum. The rev-time profile for each rotation cycle may have a trapezoidal waveform.

WEST Search History

Hide Items | Restore | Clear | Cancel

DATE: Friday, September 30, 2005

Hide?	Set Name	Query	Hit Count
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=ADJ		
☐	L4	gb 2322141	2
	DB=EPAB; PLUR=YES; OP=ADJ		
☐	L3	EP-1354997-A1.did.	0
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=ADJ		
☐	L2	10217009	5
☐	L1	de10217009	1

END OF SEARCH HISTORY

L2: Entry 4 of 5 File: DWPI Oct 22, 2003

DERWENT-ACC-NO: 2003-749469
DERWENT-WEEK: 200377

TITLE: Washing method, for program-controlled washing machine, has rev range for each rotation cycle determined in dependence on washing load

INVENTOR: DIETZ, W; KRAUSE, D ; SCHNEIDER, D

PATENT-ASSIGNEE:

ASSIGNEE	CODE
MIELE & CIE KG	MIEL
MIELE & CIE GMBH & CO	MIEL

PRIORITY-DATA: 2002DE-1017009 (April 16, 2002)

PATENT-FAMILY:

	PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
☐	EP 1354997 A1	October 22, 2003	G	000	D06F035/00
☐	DE 10217009 C1	October 16, 2003		005	D06F033/02

DESIGNATED-STATES: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
EP 1354997A1	March 27, 2003	2003EP-0006976	
DE 10217009C1	April 16, 2002	2002DE-1017009	

INT-CL (IPC): D06 F 33/02; D06 F 35/00; D06 F 58/28

ABSTRACTED-PUB-NO: DE 10217009C
BASIC-ABSTRACT:

NOVELTY - The washing method has the washing program divided into successive steps, with intermediate pauses between individual rotation cycles in which the drive motor for the rotary washing drum is operated at different revs lying between a lower rev value and an upper rev value selected in dependence on the measured loading of the washing machine drum. The rev-time profile for each rotation cycle may have a trapezoidal waveform.

USE - The washing method is used for a program-controlled washing machine, e.g. for a washing program for cottons.

ADVANTAGE - Washing method ensures all washed items fall down in washing drum due to gravity independent of washing load.

DESCRIPTION OF DRAWING(S) - The figure shows a schematic representation of the rev-time profile for the rotation of a washing machine drum during a washing program. (Drawing includes non-English language text).

CHOSEN-DRAWING: Dwg.1/1

TITLE-TERMS: WASHING METHOD PROGRAM CONTROL WASHING MACHINE RANGE ROTATING CYCLE DETERMINE DEPEND WASHING LOAD

DERWENT-CLASS: X27

EPI-CODES: X27-D01A;

SECONDARY-ACC-NO:
Non-CPI Secondary Accession Numbers: N2003-600741

Previous Doc Next Doc Go to Doc#

First Hit Previous Doc Next Doc Go to Doc#

End of Result Set

Generate Collection Print

L2: Entry 1 of 1 File: DWPI May 1, 1996

DERWENT-ACC-NO: 1996-211068
DERWENT-WEEK: 199930

TITLE: Loading stage register related to washing machine laundry type or vol. - by use of rotating drum, motor for driving drum and rotation speed signal display device and evaluation circuit, for high accuracy deg.

INVENTOR: OLSCHEWSKI, R; SEBEIKAT, W ; SIEDING, D

PATENT-ASSIGNEE:

ASSIGNEE	CODE
MIELE & CIE GMBH & CO	MIEL

PRIORITY-DATA: 1994DE-4438760 (October 29, 1994)

Search Selected Search ALL Clear

PATENT-FAMILY:

	PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
☐	EP 709512 A1	May 1, 1996	G	012	D06F039/00
☐	ES 2129725 T3	June 16, 1999		000	D06F039/00
☐	DE 4438760 A1	May 2, 1996		009	D06F033/00
☐	EP 709512 B1	January 13, 1999	G	000	D06F039/00
☐	DE 59504797 G	February 25, 1999		000	D06F039/00

DESIGNATED-STATES: AT DE ES FR GB IT AT DE ES FR GB IT

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
EP 709512A1	October 11, 1995	1995EP-0116020	
ES 2129725T3	October 11, 1995	1995EP-0116020	
ES 2129725T3		EP 709512	Based on
DE 4438760A1	October 29, 1994	1994DE-4438760	
EP 709512B1	October 11, 1995	1995EP-0116020	
DE 59504797G	October 11, 1995	1995DE-0504797	
DE 59504797G	October 11, 1995	1995EP-0116020	
DE 59504797G		EP 709512	Based on

INT-CL (IPC): D06 F 33/00; D06 F 35/00; D06 F 39/00; G01 P 3/44; G05 D 13/62

ABSTRACTED-PUB-NO: EP 709512A
BASIC-ABSTRACT:

A process comprises using a washing machine comprising:

(a) a rotating drum for the washing,

(b) a motor for driving the drum, and

(c) a device for the display of a rotation speed signal.

The loading stage is determined by an evaluator circuit in accordance with the vibration behaviour of the speed signal during the reversing cycle in a first program cycle.

Also claimed is the washing machine.

USE - Used for registering a loading stage related to the laundry type and the laundry volume in a washing machine.

ADVANTAGE - The process has a high degree of accuracy.
ABSTRACTED-PUB-NO:

EP 709512B
EQUIVALENT-ABSTRACTS:

A process comprises using a washing machine comprising:

(a) a rotating drum for the washing,

(b) a motor for driving the drum, and

(c) a device for the display of a rotation speed signal.

The loading stage is determined by an evaluator circuit in accordance with the vibration behaviour of the speed signal during the reversing cycle in a first program cycle.

Also claimed is the washing machine.

USE - Used for registering a loading stage related to the laundry type and the laundry volume in a washing machine.

ADVANTAGE - The process has a high degree of accuracy.

CHOSEN-DRAWING: Dwg.0/4

TITLE-TERMS: LOAD STAGE REGISTER RELATED WASHING MACHINE LAUNDER TYPE VOLUME ROTATING DRUM MOTOR DRIVE DRUM ROTATING SPEED SIGNAL DISPLAY DEVICE EVALUATE CIRCUIT HIGH ACCURACY DEGREE

DERWENT-CLASS: F07 X27

CPI-CODES: F03-J01;

EPI-CODES: X27-D01A;

SECONDARY-ACC-NO:
CPI Secondary Accession Numbers: C1996-067528
Non-CPI Secondary Accession Numbers: N1996-176563

Previous Doc Next Doc Go to Doc#

Day : Friday
Date: 9/30/2005

PALM INTRANET

Time: 09:51:30

Inventor Name Search Result

Your Search was:

Last Name = DIETZ
First Name = WALTER

Application#	Patent#	Status	Date Filed	Title	Inventor Name
10672783	Not Issued	30	09/26/2003	Method of controlling the revolutions of the drum of program controlled laundry machine	DIETZ, WALTER

Inventor Search Completed: No Records to Display.

Search Another: Inventor Last Name DIETZ First Name WALTER Search

To go back use Back button on your browser toolbar.

Back to PALM | ASSIGNMENT | OASIS | Home page

Day : Friday
Date: 9/30/2005

PALM INTRANET

Time: 09:51:38

Inventor Name Search Result

Your Search was:

Last Name = KRAUSE
First Name = DIETHARD

Application#	Patent#	Status	Date Filed	Title	Inventor Name
10672783	Not Issued	30	09/26/2003	Method of controlling the revolutions of the drum of program controlled laundry machine	KRAUSE, DIETHARD
10900783	Not Issued	30	07/28/2004	Method of determining the weight of laundry in a washing machine drum	KRAUSE, DIETHARD

Inventor Search Completed: No Records to Display.

Search Another: Inventor Last Name KRAUSE First Name DIETHARD Search

To go back use Back button on your browser toolbar.

Back to PALM | ASSIGNMENT | OASIS | Home page

Day : Friday
Date: 9/30/2005

PALM INTRANET

Time: 09:52:14

Inventor Name Search Result

Your Search was:

Last Name = SCHNEIDER
First Name = DANIEL

Application#	Patent#	Status	Date Filed	Title	Inventor Name
10488477	Not Issued	41	03/03/2004	Pressure-contactable power semiconductor module	SCHNEIDER, DANIEL
10502114	Not Issued	30	07/21/2004	Refrigerating appliance, especially a refrigerator	SCHNEIDER, DANIEL
10672783	Not Issued	30	09/26/2003	Method of controlling the revolutions of the drum of program controlled laundry machine	SCHNEIDER, DANIEL
10744523	Not Issued	95	12/22/2003	POLYURETHANE REACTIVE COMPOSITION	SCHNEIDER, DANIEL
60319146	Not Issued	159	03/17/2002	System and method for using a computer network search engine to raise money for and contribute to non-profit organizations	SCHNEIDER, DANIEL
07453571	Not Issued	166	12/20/1989	DRY CELL SEAL CLOSURE	SCHNEIDER, DANIEL A.
07714355	5079108	250	06/12/1991	DRY CELL SEAL CLOSURE	SCHNEIDER, DANIEL A.
08743132	Not Issued	161	11/01/1996	SECONDARY BATTERY SEPARATOR AND PROCESS FOR MAKING SAME	SCHNEIDER, DANIEL A.
08989709	6180281	250	12/12/1997	COMPOSITE SEPARATOR AND ELECTRODE	SCHNEIDER, DANIEL A.
08989803	6042965	150	12/12/1997	UNITARY SEPARATOR AND ELECTRODE STRUCTURE AND METHOD OF MANUFACTURING SEPARATOR	SCHNEIDER, DANIEL A.
09097776	6117593	150	06/15/1998	CURRENT COLLECTOR MANUFACTURE BY ARC SPRAY DEPOSITION	SCHNEIDER, DANIEL A.
09376452	Not Issued	161	08/18/1999	COMPOSITE SEPARATOR AND ELECTRODE	SCHNEIDER, DANIEL A.

09535328	6444356	150	03/27/2000	LITHIUM BATTERY WITH SECONDARY BATTERY SEPARATOR	SCHNEIDER, DANIEL A.
08236578	5500308	150	05/02/1994	ELECTROCHEMICAL CELL HAVING AN INNER SEAL MEMBER	SCHNEIDER, DANIEL ARTHUR
10387295	Not Issued	164	03/12/2003	PRESSURE DIVERTER VALVE AND SYSTEM	SCHNEIDER, DANIEL E.
60413173	Not Issued	159	09/24/2002	Pressure diverter valve and system	SCHNEIDER, DANIEL E.
60697072	Not Issued	20	07/05/2005	Multiport-capable cryptosystem	SCHNEIDER, DANIEL E.
06055567	4230125	150	07/09/1979	METHOD AND APPARATUS FOR EFFECTING THE PROSPECTIVE FOREWARNING DIAGNOSIS OF SUDDEN BRAIN DEATH AND HEART DEATH AND OTHER BRAIN-HEART- BODY GROWTH MALADIES SUCH AS SCHIZOPHRENIA AND CANCER AND THE LIKE	SCHNEIDER, DANIEL E.
06283586	Not Issued	161	07/15/1981	PSYCHOMETRIC METHOD AND APPARATUS RELATING TO THE ENTIRELY NEW CONCEPT OF AND DEVICE FOR TESTING THE TANGIBLE AND DYNAMIC INTELLIGENCE SELF RATHER THAN ABSTRACT INTELLIGENCE	SCHNEIDER, DANIEL E.
06460094	4495950	150	01/21/1983	OREEG PROCESS MATRIX SYNCHRONIZER SYSTEM	SCHNEIDER, DANIEL E.
06516392	Not Issued	166	07/22/1983	COMPUTER BUS DEADLOCK PREVENTION	SCHNEIDER, DANIEL E.
06934584	4868741	150	11/25/1986	COMPUTER BUS DEADLOCK PREVENTION	SCHNEIDER, DANIEL E.
07979181	5368554	250	11/20/1992	BLOOD PUMPING SYSTEM WITH SELECTIVE BACKFLOW WARNING	SCHNEIDER, DANIEL E.
09546033	Not Issued	161	04/10/2000	Insulated pipe line and method of making	SCHNEIDER, DANIEL F.
09734441	Not Issued	161	12/11/2000	Methods of continuously forming an insulated body	SCHNEIDER, DANIEL F.
06189074	Not Issued	161	09/22/1980	METHOD OF MAKING TETRAETHYL SILICATE	SCHNEIDER, DANIEL F.

				MIXTURE	
06255479	4323690	150	04/20/1981	METHOD OF MAKING SILICATE ESTERS	SCHNEIDER, DANIEL F.
10394680	6910781	150	03/21/2003	QUICK RELEASE VEHICLE MIRROR	SCHNEIDER, DANIEL H.
10754391	Not Issued	30	01/09/2004	Saddlebag mounting system	SCHNEIDER, DANIEL H.
09862713	Not Issued	161	05/22/2001	Handle assembly for a hose and coupling device and a method of assembling the same	SCHNEIDER, DANIEL HENRY
60262743	Not Issued	159	01/19/2001	Handle assembly for a hose and coupling device and a method of assembling the same	SCHNEIDER, DANIEL HENRY
09616284	Not Issued	161	07/14/2000	Method and apparatus for the automated generation of nucleic acid ligands	SCHNEIDER, DANIEL J.
09815171	6716580	150	03/22/2001	METHOD AND APPARATUS FOR THE AUTOMATED GENERATION OF NUCLEIC ACID LIGANDS	SCHNEIDER, DANIEL J.
09993294	Not Issued	161	11/21/2001	Method and apparatus for the automated generation of nucleic acid ligands	SCHNEIDER, DANIEL J.
10717105	Not Issued	30	11/18/2003	Method and apparatus for the automated generation of nucleic acid ligands	SCHNEIDER, DANIEL J.
60177859	Not Issued	159	01/24/2000	River/Groundwater Low Dam Flood Control And Water Storage System	SCHNEIDER, DANIEL J.
60191182	Not Issued	159	03/22/2000	FULL POWER STAIR STEP FISHWAY DAM BYPASS FOR 100% SAFE FISH PASSAGE AROUND HIGH HEAD HYDROPOWER DAMS	SCHNEIDER, DANIEL J.
60235866	Not Issued	159	09/27/2000	Tidal powered hydroelectric generator	SCHNEIDER, DANIEL J.
60357297	Not Issued	159	02/15/2002	Methods for the multiplexed evaluation of photocrosslinking nucleic acid ligands	SCHNEIDER, DANIEL J.
60398666	Not Issued	159	07/26/2002	Methods for the multiplexed evaluation of photocrosslinking nucleic acid ligands	SCHNEIDER, DANIEL J.
60400759	Not Issued	159	08/02/2002	Methods for the multiplexed evaluation of photocrosslinking nucleic acid ligands	SCHNEIDER, DANIEL J.

60454133	Not Issued	159	03/12/2003	Method of preventing and treating infections that attack mucosa and assisting rehabilitation thereafter using topically applied vitamin C	SCHNEIDER, DANIEL J.
06297022	Not Issued	161	08/27/1981	FLUID DRIVEN POWER PRODUCING APPARATUS	SCHNEIDER, DANIEL J.
06425379	4563168	250	09/28/1982	LOAD DISTRIBUTING CHAIN DRIVE ARRANGEMENT	SCHNEIDER, DANIEL J.
06540318	4547412	150	10/11/1983	HEATING FOAM CONTAINER IN UNRESTRICTED STATE TO INCREASE STIFFNESS	SCHNEIDER, DANIEL J.
06572743	4579275	150	01/23/1984	CONTAINERS	SCHNEIDER, DANIEL J.
08238863	5503978	150	05/06/1994	METHOD FOR IDENTIFICATION OF HIGH AFFINITY DNA LIGANDS OF HIV-1 REVERSE TRANSCRIPTASE	SCHNEIDER, DANIEL J.
08443407	5786462	150	05/17/1995	HIGH AFFINITY SSDNA LIGANDS OF HIV-1 REVERSE TRANSCRIPTASE	SCHNEIDER, DANIEL J.
08792075	5861254	150	01/31/1997	FLOW CELL SELEX	SCHNEIDER, DANIEL J.
09232946	6569620	150	01/19/1999	METHOD FOR THE AUTOMATED GENERATION OF NUCLEIC ACID LIGANDS	SCHNEIDER, DANIEL J.

Search and Display More Records.

Search Another: Inventor **Last Name** SCHNEIDER **First Name** DANIEL Search

To go back use Back button on your browser toolbar.

Back to PALM | ASSIGNMENT | OASIS | Home page

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	352	68/12.04.ccls. or 68/12.06.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2005/09/30 10:17
L2	47	l1 and horizontal and (load with rotation)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2005/09/30 10:26
L3	12	8/158.ccls. and horizontal and (load with rotation)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2005/09/30 10:30
L4	1360	8/158.ccls. or l1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2005/09/30 10:30
L5	41	l4 and (depend$4 near3 load)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2005/09/30 10:31

WEST Search History

Hide Items | Restore | Clear | Cancel

DATE: Friday, September 30, 2005

Hide?	Set Name	Query	Hit Count
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=ADJ		
☐	L5	de 3933355	2
	DB=EPAB; PLUR=YES; OP=ADJ		
☐	L4	EP-709512-A1.did.	1
☐	L3	EP-709512-A1.did.	1
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=ADJ		
☐	L2	de 4438760	1
☐	L1	de4438760	0

END OF SEARCH HISTORY

First Hit Previous Doc Next Doc Go to Doc#
End of Result Set
Generate Collection Print

L1: Entry 1 of 1 File: EPAB Oct 16, 2003

PUB-NO: DE010217009C1
DOCUMENT-IDENTIFIER: DE 10217009 C1
TITLE: Washing method, for program-controlled washing machine, has rev range for each rotation cycle determined in dependence on washing load

PUBN-DATE: October 16, 2003

INVENTOR-INFORMATION:

NAME	COUNTRY
DIETZ, WALTER	DE
KRAUSE, DIETHARD	DE
SCHNEIDER, DANIEL	DE

ASSIGNEE-INFORMATION:

NAME	COUNTRY
MIELE & CIE	DE

APPL-NO: DE10217009
APPL-DATE: April 16, 2002

PRIORITY-DATA: DE10217009A (April 16, 2002)

INT-CL (IPC): D06 F 33/02
EUR-CL (EPC): D06F035/00; D06F058/28

ABSTRACT:

CHG DATE=20040306 STATUS=O>The washing method has the washing program divided into successive steps, with intermediate pauses between individual rotation cycles in which the drive motor for the rotary washing drum is operated at different revs lying between a lower rev value and an upper rev value selected in dependence on the measured loading of the washing machine drum. The rev-time profile for each rotation cycle may have a trapezoidal waveform.

Previous Doc Next Doc Go to Doc#